Before the

DEPARTMENT OF AGRICULTURE - Rural Utilities Service
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Administration
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In the Matter of:

Broadband Initiatives Program and Broadband   Docket No: 0907141137-91375-05
Technology Opportunities Program

COMMENTS OF CONXX, INC.

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EXECUTIVE SUMMARY

Large-area broadband network projects present a compelling opportunity to provide enhanced broadband communication services throughout an entire region. However, few communities have been able to put together an eco-system that combines critical infrastructure with an economic business model that is self sustaining. Funding has also been a significant hurdle, particularly in the more rural parts of the country, limiting both private and public investment in the expansion of broadband services.

CONXX focuses on these un-served and under-served markets, and is pleased to provide this RFI response to the NTIA / RUS Broadband Technology Opportunities Program. CONXX is supportive of BTOP's goals and objectives, and is encouraged by this program to improve broadband and other critical communication services to the un-served and under-served areas in the United States.

In summary, CONXX believes that:

- The communication between the application and the agencies requires improvement. Each applicant is making an investment and improved communication will limit the financial impact as well as reduce the time commitment to each organization.

- Open access, particularly in rural communities, will stimulate competition and benefit consumers, while providing accelerated broadband penetration.

- Local government participation in the network can create opportunities previously unattainable to them in the delivery of enhanced services, especially in rural communities.

- Coverage and cost-effectiveness should be key considerations in which proposals get funded.

- Proposals should demonstrate comprehensive project plans to ensure that completion time frames can be effectively met while showing the project's sustainability.

- Proposed solutions should be able to demonstrate a track record of success.

- 'Un-served' and 'under-served' are relative terms. Care should be taken to not define these terms too arbitrarily, or that would eliminate a technology that may otherwise be the best option for a particular area that cannot be served effectively any other way.

CONXX respectfully submits this RFI response to the NTIA for the U.S. Department of Commerce Broadband Technology Opportunities Program.

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INTRODUCTION

CONXX has developed network architecture and infrastructure to help rural communities overcome both digital and economic divides. The CONXX Carrier Communication Platform combines carrier-grade telecommunications technology at the core with cost-effective Ethernet technology at the edge. The CONXX Carrier Communication Observer is a full-service, Web-based network management and operating support system for municipal networks. The CONXX platform first began operating successfully since 2003 as AllCoNet2 in Allegany County, Maryland, and is the only municipal network to receive a "Smart Practice" designation from the Federal Emergency Management Administration (FEMA). The CONXX platform continues to grow and now delivers services in over 80 communities. The privately held company's wired and wireless networks support multiple services and service providers. CONXX is headquartered in Cumberland, Maryland, and maintains a regional office in Salt Lake City, Utah. For more information visit http://www.conxx.net.

DISCUSSION

I. The Application and Review Process

A. Streamlining the Applications.

In what ways should RUS and NTIA streamline the applications to reduce the burden on applicants, while still obtaining the requisite information to fulfill the statutory requirements set forth in the Recovery Act?

One section that could be simplified is the "Proposed Service Areas – Section D". The amount of information requested is arbitrary and difficult to quantify clearly and effectively.   This section was the most time consuming process required by the current application process.

Should the agencies modify the two-step review process, and if so, how?
We recommend the two-step review process does have room for improvement. It can be anticipated that there will be an increased volume of applications submitted for during the second round. To streamline the process, we encourage an initial review of the applications for completeness and compliance. Applications that do not meet the requirements of the published NoFA should be removed from the evaluation process.

By eliminating these non-compliant proposals early in the process you will ensure the most efficient use of time by the evaluator on applications that fully meet the defined requirements of the NoFA.

A number of questions have arisen with the state review of the applications. The NoFA should include a matrix to provide guidance and support to the state when the applications are reviewed. This will allow all applications to be evaluated on a common baseline. This will prevent confusion when a state's defined priorities may be inconsistent with the published priorities of the NoFA. This would in effect reduce some of the arbitrary components in the evaluation process.

Should the agencies re-examine the use of a single application for applicants applying to both BIP and BTOP to fund infrastructure projects?
The single application process provides a simple method for applicants to apply for BIP or BTOP infrastructure projects. We encourage the NTIA to allow the applicant to have the ability to selecting which funding alternative they wish to use for their project. This will allow the applicant to determine which funding source will be the best for their specific project.

How should NTIA link broadband infrastructure, public computer center and sustainable adoption projects through the application process?
The original NoFA provided a section to include applications by the same applicant. We recommend the new application include a section which will allow participants to identify complementary projects by different applicant in broadband infrastructure, public computer centers, and sustainable adoption projects. In some regional projects applicants partner to take advantage of synergies and did not have a clear way to define these synergies on the application. Also, in some cases existing infrastructures or projects where already available in the region that would have been augmented by project applications submitted to BIP or BTOP.

How can the state review process be streamlined?
There were a number of perceived difficulties with how the state review process was handled in the first round for submitted proposals. For the second round of funding the states should be provided clear and defined requirements for the evaluation process.

In the first round, each state evaluated proposals based on their different internal guidelines. These guidelines were different for each state, resulting in a difficult process to provide an efficient comparison between proposals in different states.

Areas to address:
Collection of information - States were required to independently collect data from each project after proposals had been submitted for review. The NOFA should define the information that will be shared with the states for the evaluation process.

Compliant Proposals – States should not be required to review non-compliant proposals. Any proposal that is non-compliant should not be forwarded to the states for consideration.

Multi-State – Clear guidelines should be provided for applications that have coverage areas in multiple states. Without these guidelines each state may review the proposal differently.

1. New Entities.

What type of information should RUS and NTIA request from new businesses, particularly those that have been newly created for the purpose of applying for grants under the BIP and BTOP programs?

New organizations should have the same opportunity to submit an application for funding.   Historical financial statements will not provide insight into the going concern of these organizations. These new organization should be required to include a business model with their application. In circumstances where multiple entities are involved in the application, combined financial statements will provide sufficient information for evaluation. New businesses, without consortiums, partnerships or local affiliations, should provide sustainability models to ensure participating agencies the viability of the project.

When a new entity is created to provide services (i.e. public/private organization) we recommend the partnering organizations provide historical financials. While these historical financials will have no impact on the financials of the project, they will provide insight into the experience of the partners. We encourage caution using federal dollars on projects with limited partnership experience in such ventures.

2. Consortiums and Public-Private Partnerships.

Similarly, how should the application is revised to reflect the participation of consortiums or public-private partnerships in the application process?
An additional section should be provided in the Eligible Entities section of the application to provide details related to the consortiums or partnership involved in the application. Each organization should have the opportunity to provide the basic organization details on the application.

Should certain critical information be requested from all members of such groups, in addition to the designated lead applicant, to sufficiently evaluate the application?
Critical information should be requested from the other participating organizations as part of the due diligence phase. The success of a project is directly related to the cohesiveness of the entire partnership of the project. Consideration of all project participants is critical to understand the viability of a project.

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3. Specification of Service Areas.

What level of data collection and documentation should be required of applicants to establish the boundaries of the proposed funded service areas?
Without defined national standards, the mapping process will be difficult to standardize.

The FCC has opened a public proceeding to respond to a request for proprietary broadband commercial information is made available to the broadband stimulus program Recovery Act. This information could provide additional insight into the collection of information.

Data collection should be provided on a GIS level for each application defining areas that will have service as part of the project. There is insufficient data available to prepare these current reports, and the primary collection of this data should not be the responsibility for the applicant. The collection of information by ZIP code is too vague and the collection of data by census block would be too consuming to expect in the short duration of time.

Each applicant should complete due diligence to provide accurate and reliable reports based on the data that is available to be collected. The applicant should clearly define all assumptions and provide clear input on how the data was collected. During the due diligence phase a more thorough review of the data collection and documentation should be completed.

4. Relationship between BIP and BTOP.

Should these kinds of rural infrastructure applications continue to be required to be submitted to RUS or should the agencies permit rural applications to be submitted directly to NTIA, without having to be submitted to RUS as well, and if so, how should NTIA and RUS proceed in a manner that rewards the leveraging of resources and the most efficient use of Federal funds?

Each applicant should have the ability to select which agency will review the application. The application has defined a specific business model and is in the best position to identify which agency would like to be considered by for funding.

Are there situations where it is better to give a loan to an applicant as opposed to a grant?
As a general rule of thumb an application from a for-profit entity with a defined business models would be best suited for loan funding. The rule of thumb for grants would be for public models applications designed to provide an infrastructure (i.e. public roads) that will bring benefit to the community. The end services will not be provided by the public entity, but by private entities.

For the application process each applicant will submit for the funding which is the best for their application. The applicant is in the best position to determine which funding they wish to pursue.

Are there applicants for which a loan would not be acceptable, and if so, how should the programs consider them?

B. Transparency and Confidentiality.

Should the public be given greater access to application data submitted to BIP and BTOP?
Once a project is approved additional non-proprietary details should be released to public. The applicant should have the ability to provide an executive summary and project overview to be released to the public.

The value of the public information will allow future projects to access a repository of business models and ideas from which they can develop future plans. It will be importance as part of the transparency of the reporting that a periodic status is made available for each funded project as well. The collection of this data will be invaluable for future funding opportunities or for projects which will pursue other avenues of funding.

Which data should be made publicly available and which data should be considered confidential or proprietary?
Applicants should have the ability to protect intellectual capital of technology on which they have spent time and resource to develop. These proposals represent a significant investment of time for business models and solutions to meet the needs of these communities. The applicant should be encouraged to provide non-proprietary information on the business model, infrastructure design, and technology solution.

C. Outreach and Support.

What method of support and outreach was most effective?
An accurate and complete FAQ database should be available and searchable on the public website. This would provide a simple resource for all questions during the application process. The FAQ database would also simplify the communication process for each agency, and reduce the number of redundant questions. The FAQ database will also provide a resource to reference during the application process to the applicant on how certain sections were responded to.

D. NTIA Expert Review Process.

To further the efficient and expeditious disbursement of BTOP funds, should NTIA continue to rely on unpaid experts as reviewers?

We have a concern with the qualification and selection of the unpaid experts as reviewers. The qualifications for these experts and their understanding of the technical and business details of the application should be clearly defined in the NOFA. There is an unfair situation if the reviewer is not conversant in the benefits of the application due to their actual technical background.

The applications should be reviewed based on its Business Model, Technology Solution, Network Build-out plan, and community benefit. Each category should be evaluated during the preliminary and due diligence reviews of the project.

Business Model – Sustainability of the proposal
Technical Model – Technical feasibility of the proposal.
Community Model – Review of actual benefit to the community.
Deployment Model – Review of the project plan and deployment schedule.

We recommend the use of contractor staff to ensure the application process is consistent, clearly defined, and fair for all applicants.

II. Policy Issues Addressed in the NOFA

A. Funding Priorities and Objectives.

1. Middle Mile "Comprehensive Community" Projects.

Should RUS and/or NTIA focus on or limit round 2 funding on projects that will deliver middle mile infrastructure facilities into a group of communities and connect key anchor institutions within those communities?

Proposals should be ranked based on the community or regional support they garner. An important factor in successful community based deployments is the involvement of the community from the beginning of the project. Projects without this support tend to encounter delays and difficulties, when the community feels the services do not accurately represent the services perceived as necessary in the community.

Should we give priority to those middle mile projects in which there are commitments from last mile service providers to use the middle mile network to serve end users in the community?
A middle mile project that meets the "Open Access" requirements should be able to provide services to any last mile proposal. A commitment from local providers is a

critical success factor to ensure the success of a project. This commitment means these providers will be involved early on in the process to ensure the success of the deployment.

Should the agencies' goal be to fund middle mile projects that provide new coverage of the greatest population and geography so that we can be assured that the benefits of broadband are reaching the greatest number of people?

Each project should be evaluated based on the benefit to the community. To use population and geography as a limiting factor will exclude areas which have the greatest need for service. Since the focus is to deliver services to rural and underserved regions the use of population would not provide the greatest benefit to these communities.

Should we target projects that create "comprehensive communities" by installing high capacity middle mile facilities between anchor institutions that bring essential health, medical, and educational services to citizens that they may not have today?

In the first round of filing for stimulus funds, many proposals presented an overlap in services. Many of these communities were unaware of the proposed services and were never involved in the proposal process to help define the actual needs of services. A proposal with community and regional support will ensure the applicant will have a greater chance at delivering the services according to the defined project plan.

A "Comprehensive Community" solution should not be limited to anchor institutions. For a marginal incremental cost a well-defined project will also be able to provide services beyond to anchor institutions to the community. If these services were to be provided as separate project there would be no guarantee these services would ever be made available.

Should certain institutions, such as educational facilities, be given greater weight to reflect their impact on economic development or a greater need or use for broadband services?
Greater weight should be provided to projects that provide the maximum benefit to a community, NOT to focus solely on certain institutions. Focusing only on certain facilities, limits the design to exclude certain factors which are important to the community. A design should provide maximum benefit to the overall community and not the bare minimum to support minimum standards. The design should be evaluated to provide flexibility for the community for the next 10 year of services.

To the extent that RUS and NTIA do focus the remaining funds on "comprehensive community" projects, what attributes should the agencies be looking for in such projects?

Factors such as economic development, education, social inclusion, public safety, and broadband connectivity should be all included in the core consideration for a project. Each of these organizations should be active participants in the project to create a true "Comprehensive Community".

Should we consider the number of existing community anchor institutions that intend to connect to the middle mile network as well as the number of unserved and underserved communities and vulnerable populations (i.e., elderly, low-income, minority) that it will cover?

Priority should be given to projects that will maximize the current and future needs of a community. While is not feasible to immediately provide all of these services for a community. An infrastructure that only addresses the short-term needs of the community will not provide the long-term benefits the ARRA money is allocated to address. A multi-service infrastructure will allow the community to provide services to the meet the needs of the unserved, underserved, and vulnerable populations as they are identified.

2. Economic Development.

Should RUS and/or NTIA allocate a portion of the remaining funds available under the BIP and BTOP programs to promote a regional economic development approach to broadband deployment?

Some communities were unaware of first round applications for the proposed services and were not involved in the proposal process. A proposal with regional support will ensure the applicant will have a greater chance at delivering the services according to the defined project plan.

Proposals should be ranked based on the regional support they garner. An important factor in successful regional based deployments is the involvement of the region from the beginning of the project. Projects without this support tend to encounter delays and difficulties, when the region feels the services do not accurately represent the services required for the area.

Should funds be targeted toward areas, either urban or rural, with innovative economic strategies, or those suffering exceptional economic hardship?

Each application should be reviewed based on the benefits it brings to the region, according to the defined goals of the stimulus funds. To exclude certain application may prohibit the solutions for an area to be presented. Each application should be evaluated based on the immediate needs of the proposed region area.

3. Targeted Populations.

Should RUS and NTIA allocate a portion of the remaining funds to specific population groups?

No. The Recovery Act dollars should provide support build the broadband infrastructure necessary to connect every community and give access to faster, more reliable Internet service to citizens, businesses, units of government, schools and public safety providers throughout the United States. To target certain population groups will not maximize the benefit of the "Comprehensive Community" which includes education, government, business, public safety, and community.

For example, should the agencies revise elements of the BIP and BTOP programs to ensure that tribal entities, or entities proposing to serve tribal lands, have sufficient resources to provide these historically unserved and underserved areas with access to broadband service?

This example does not address the primary broadband provisions as defined in the America Recovery and Reinvestment Act of 2009.

Similarly, should public housing authorities be specifically targeted for funding as entities serving low-income populations that have traditionally been unserved or underserved by broadband service?

This example does not address the primary broadband provisions as defined in the America Recovery and Reinvestment Act of 2009. Public Housing has a separate allocation of budget of approximately $12 billion in the ARRA package to address these solutions.

Should libraries be targeted as sites for public computer access, and if so, how would BTOP funding interact with e-Rate funding provided through the Schools and Libraries program?

No, libraries should not be targeted as sites for public computer centers. Libraries have access to funding to deploy such solutions through e-Rate funding guidelines. A focus should be made to solutions which do not have alternative sources of funding.

4. Other Changes.

What other changes are recommended?
Communication:

The communication in the first round of filling between the applicant and agency provides room for improvement. Each applicant during the first round of funding has made an investment to provide critical services to communities. This investment includes time, materials, and monies associated with the application process. The limited communication process directly impacts all of the applicants while they wait for feedback on the proposal status.   This delay impacts the business operations and decisions of each applicant.

At a minimum, each applicant should have the ability to know the current status of their application with the following list:

- Received – The completed application has been received.
- Compliance Review – The application is being reviewed for completeness, accuracy, and compliance.
- Proposal Review – The application is being review and scored for value and impact.
- State Review – The application has been submitted to the state for review.
- Due Diligence – The application is under review in the due diligence phase.

Each application should receive a final notification based on final funding status.
- Approved – An application has been approved for funding.
- Non-Compliant – A proposal has been identified as non-compliant
- Deferred – A project will not be funded in the current round of funding.

To the extent that we do target the funds to a particular type of project or funding proposal, how if at all, should we modify our evaluation criteria?
The evaluation process should include a step in the due diligence phase to poll the local and regional communities that would be benefited by the proposal. A comprehensive community requires community participation. The local support should be a critical component of the evaluation and award process.

How might the agencies best leverage existing broadband infrastructure to reach currently unserved and underserved areas?
Agencies should look at extending the reach of existing fiber and licensed wireless networks. Taking advantage of wireless technologies, new services can be provided on top of existing services without impacting the security and performance of existing infrastructure. Statistically, most underserved areas are within reach of current broadband infrastructure.

B. Program Definitions.
In what ways should these definitions be revised?
Special effort should be made in the evaluation process to identify the actual costs and timeframe to deliver services to defined covered customer percentages, upon completion of the proposed infrastructure. A covered customer should be defined as a customer who can receive services on the network without additional infrastructure costs (excluding installation and onsite CPE costs).

Some proposals do not clearly differentiate between a covered customer and a potential customer. A covered customer should be able to receive broadband services within 5 business days of requesting the service. An example would be a residential customer who receives broadband service from a participating service provider. The service provider would install the necessary CPE equipment (if required) and provision the services.

A potential customer would require additional infrastructure build-out to provide services. An example would be a FTTH customer who is within a half mile of a fiber run, but would require a last-mile fiber build or a wireless distribution in order to receive broadband services. These customers have additional costs associated with the deployment. Residential potential customers should not be expected to pay for the costs associated to receive these services. These additional costs should be addressed in the sustainability response for the proposal. The costs associated with the potential customers should be included in the Total Cost of Ownership calculations for the proposed networks.

Measuring broadband availability is difficult, and no consumer price data is available nationwide. Geographically detailed broadband data with national coverage is available for U.S. ZIP Code areas from the Federal Communications Commission (FCC). FCC data reports the number of companies providing broadband service in a ZIP Code area. This data overestimate broadband availability because broadband "availability" requires that only one customer is located in that area. Availability should be interpreted with these limitations in mind.

Should they be modified to include a specific factor relating to the affordability of broadband service or the socioeconomic makeup of a given defined service area, and, if so, how should such factors be measured?
Covered customers and potential customer percentages should be clearly defined between residential and business customers. Each category should have a defined cost per customer to deliver broadband services for both fixed and wired solutions.

These numbers will highlight the affordability of service for social inclusion projects and the feasibility of offering such services on a per user basis.

How should satellite-based proposals be evaluated against these criteria?
Satellite based alternatives will always be available to any consumers who will never be covered by traditional broadband services. Satellite service offer best-effort services and not the commercial grade services required to provide service to education, public safety, healthcare, and business applications.

Should the agencies incorporate actual speeds into the definition of broadband and forego using advertised speeds?

Baseline speeds are important to provide guidelines on the delivery of the necessary services. A baseline speeds should be defined for each technology (fiber, DSL, wireless, Cable, etc.) and not lumped into a single definition for broadband services. This will allow each proposal to be fairly evaluated based on the speeds of the proposed technology and not an arbitrary measurement.

C. Public Notice of Service Areas.

How should the public notice process be refined?
The public notice process can be refined in the following steps:

- In addition to the opportunity for each service provider to respond to a public notice, each applicant should have the opportunity to submit secondary responses.
- Existing Service providers should be required to provide substantive detail on coverage maps in their public response.
- Existing Service providers should be required to provide substantive detail on service plans in their public response.

What alternative verification methods could be established that would be fair to the applicant and the entity questioning the applicant's service area?
One area of common ground would be to use the current FCC form 477 to evaluate the services currently available in the proposed service area. This form, while not a public document, should be made available on a limited basis to allow the proposer to respond to services provided.

If, the form 477 is not available, the service provider should be willing to provide customer information in the defined service areas (with a proper Non-Disclosure Agreement).

What type of information should be collected from the entity questioning the service area and what should be publicly disclosed?
The questioning service provider should be required to provide publicly an executive summary on the delivered services available in the area. During the due diligence phase the service provider should be willing to provide the following information to be actively considered for each area in dispute. The information provided in the due diligence phase is not required to be publicly disclosed.

The service provider should be willing to provide the following details:
- Number of customers in each defined service area.
- Explanation on how the current services and proposed services cannot be complementary.

- Service plans and prices available in each defined service area.
- Identify other services providers in the proposed service area.

D. Interconnection and Nondiscrimination Requirements.

Although RUS and NTIA are not inclined to make significant changes to the interconnection and nondiscrimination requirements, are any minor adjustments to these requirements necessary? In particular, should they continue to be applied to all types of infrastructure projects regardless of the nature of the entity?
We recommend the current interconnection and nondiscrimination requirements continue to be applied to all infrastructure projects.

Is it necessary to clarify the term "interconnection" or the extent of the interconnection obligation?
Each proposer should have the opportunity to define "interconnection" as an element of their proposal. This will ensure the definition is clearly defined for the project.

E. Sale of Project Assets.

Should this section be revised to adopt a more flexible approach toward awardees mergers, consistent with USDA and DOC regulations, while still ensuring that awardees are not receiving unjust enrichment from the sale of award-funded assets for profit?
A general guideline should be defined to ensure the USDA and DOC regulations are defined and understood for each awarded project. In addition, a petition process should be defined that will allow any awarded project to petition the funding agency for an early sale of project assets. There will be certain circumstances where the sale of project assets may be in the best interest of all involved parties. A petition process will provide the flexibility to handle these specific cases.

F. Cost Effectiveness.

How should NTIA and RUS assess the cost effectiveness or cost reasonableness of a particular project?
The NTIA and RUS should create common cost effectiveness/reasonableness measurements for each project. This will ensure that projects with unreasonable costs are excluded from award. These measurements should be made for the deployment and operational costs of the network. Some measurements could include:
- Residential Cost: Cost of the projected divided by total population covered.
- Business Costs: Cost of the project divided by the total business base covered.
- Anchor Cost: Cost of the project divided by the total supported anchor institutions.
- Educational Cost: Cost of the project divided by the total supported educational facilities.

- Project Return: Cost of the project divided by the yearly operational costs savings.

How should the agencies take these various factors into consideration when evaluating broadband infrastructure projects?
Each project in the due diligence phase should have be evaluated with a common set of metrics for review. These factors will create a common set of factors to evaluate infrastructure projects.

What evidence should we require from applicants to ensure that unnecessary costs have not been added to the project?

In the due diligence phase all proposals be required to clearly identify a technology refresh plan for equipment proposed in the infrastructure. While the last-mile equipment may have a useful life of 7-10 years, the last-mile technologies may only have a useful life of 5 years. As new technologies are developed and new standards defined, each network should provide a business plan to show the flexibility to adapt to new developments and technologies. This plan should be included in the feasibility and sustainability of the network.

A proposal that can incorporate new technologies on the existing infrastructure should score higher that networks that would require significant upgrades and costs in order to provide these future services.

G. Other.

What other substantive changes to the NOFA should RUS and NTIA consider that would encourage applicant participation, enhance the programs, and satisfy the goals of the Recovery Act?
The professional engineering requirement should be transferred the due diligence phase of the evaluation process. Many of the applicants do not have an on-staff PE to provide the services necessary and this requirement creates an expensive up front cost to submit the application. This creates an unfair advantage for applicants that can generate this certification internally. By moving this certification to the Due Diligence phase will allow more applications to be considered for funding.

CONCLUSION

CONXX encourages the NTIA and RUS to consider the proposed policies in these comments.

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